

AMENDMENTS

In the Claims:

Please amend the claims as indicated hereafter.

1. (Previously Presented) A single logical screen (SLS) graphical display system, comprising:

an interface configured to receive graphical data defining an image;

a plurality of display devices; and

a plurality of graphical acceleration units, each of said plurality of graphical acceleration units respectively interfaced with one of said plurality of display devices and configured to render a portion of said graphical data to said one display device such that said display devices display said image as a single logical screen, wherein at least one of said graphical acceleration units comprises:

a first graphical pipeline configured to receive and process a graphical command, said first graphical pipeline configured to render graphical data from said graphical command;

a second graphical pipeline configured to receive and process said graphical command; and

a compositor interfaced with said first and second graphical pipelines and one of said display devices.

2. (Previously Presented) The system of claim 1, wherein:

said first graphical pipeline is configured to mathematically combine a first offset with coordinate values included in said graphical data rendered by said first graphical pipeline;

said second graphical pipeline is configured to mathematically combine a second offset with coordinate values included in graphical data rendered by said second graphical pipeline;
and

said compositor is configured to blend color values associated with corresponding coordinate values within said graphical data rendered by said first and second graphical pipelines.


3. (Previously Presented) The system of claim 1, wherein said second graphical pipeline is configured to discard said graphical data rendered by said first graphical pipeline.

4. (Previously Presented) The system of claim 3, wherein said first graphical pipeline is configured to receive an input identifying a first coordinate range and is configured to discard graphical data rendered by said second pipeline based on said first coordinate range, and wherein said second graphical pipeline is configured to receive an input identifying a second coordinate range and is configured to discard said graphical data rendered by said first graphical pipeline based on said second coordinate range.

5. (Original) The system of claim 3, wherein said first graphical pipeline is further configured to super sample said graphical data rendered by said first graphical pipeline, and wherein said second graphical pipeline is further configured to super sample said graphical data rendered by said second graphical pipeline.

6. (Previously Presented) The system of claim 5, wherein said compositor is configured to blend color values included in said graphical data rendered by said first and second graphical pipelines.

7. (Previously Presented) A single logical screen (SLS) graphical display system, comprising:

 first rendering means for rendering graphical data from a first graphical command received by said first rendering means, said first rendering means including a plurality of pipeline means for rendering, in parallel, said graphical data from said first graphical command and a compositing means for compositing said graphical data rendered by said first plurality of pipeline means, each of said first plurality of pipeline means configured to render at least a portion of said graphical data from said first graphical command;

second rendering means for rendering graphical data from a second graphical command received by said second rendering means, said second rendering means including a plurality of pipeline means for rendering, in parallel, said graphical data from said second graphical command and a compositing means for compositing said graphical data rendered by said second plurality of pipeline means, each of said second plurality of pipeline means configured to render at least a portion of said graphical data from said second graphical command;

first display means for displaying a first image based on graphical data composited by said compositing means of said first rendering means; and

second display means for displaying a second image based on graphical data composited by said compositing means of said second rendering means,

wherein said first and second images define at least a portion of a single logical screen image.

8. (Previously Presented) The system of claim 7, wherein each of said plurality of pipeline means of said first rendering means includes a means for mathematically combining a different offset to coordinate values included in said graphical data from said first graphical command, and wherein said compositing means of said first rendering means includes a means for blending color values associated with corresponding coordinate values within said graphical data from said first graphical command.

9. (Previously Presented) The system of claim 7, wherein said first rendering means includes a means for receiving an input identifying a coordinate range, and wherein one of said plurality of pipeline means of said first rendering means includes a means for discarding, based on said coordinate range, graphical data from said first graphical command.

10. (Previously Presented) The system of claim 9, wherein each of said plurality of pipeline means of said first rendering means is configured to super sample graphical data from said first graphical command, and wherein said compositing means of said first rendering means includes a means for blending color values included in said super sampled graphical data.

11. (Previously Presented) A single logical screen (SLS) graphical display method, comprising:

- receiving graphical data defining an image;
- rendering different portions of said graphical data via different ones of a plurality of graphical acceleration units;
- in each of said graphical acceleration units, compositing the graphical data rendered by said each graphical acceleration unit; and
- displaying said image across a plurality of display devices as a single logical screen, said displayed image based on said composited graphical data,

wherein said rendering comprises rendering, in one of said graphical acceleration units, graphical data from a single graphical command via each of a plurality of pipelines.

12. (Previously Presented) The method of claim 11, wherein said rendering further comprises mathematically combining different offsets with coordinate values included in said graphical data from said single graphical command, and wherein said compositing comprises blending color values associated with said coordinate values.

13. (Previously Presented) The method of claim 11, further comprising:

- receiving an input identifying a coordinate range; and
- discarding, via one of said plurality of graphical pipelines, graphical data from said single graphical command based on said coordinate range.

14. (Previously Presented) The method of claim 13, wherein said rendering further comprises super-sampling graphical data from said single graphical command, and wherein said compositing further comprises blending color values included in said super sampled graphical data.

15. (Canceled)

16. (Previously Presented) The system of claim 1, further comprising a graphics application, wherein each of the portions of said graphical data rendered by said plurality of graphical acceleration units is transmitted from said graphics application.

17. (Previously Presented) The system of claim 2, wherein said first and second graphical pipelines, by respectively combining said first and second offsets with coordinate values in said graphical data rendered by said first and second graphical pipelines, offsets an image defined by said graphical data rendered by said first graphical pipeline with respect to an image defined by said graphical data rendered by said second graphical pipeline such that said compositor defines a jitter enhanced image by blending said color values.

18. (Canceled)

19. (Previously Presented) The method of claim 11, further comprising transmitting each of said portions of said graphical data from a single graphics application.

20. (Previously Presented) The method of claim 12, wherein said combining causes said compositing to jitter enhance said image.

21. (Currently Amended) A single logical screen (SLS) graphical display system, comprising:

an interface configured to receive graphical data defining an image;

a plurality of display devices; and

a plurality of graphical acceleration units, each of said graphical acceleration units interfaced with a respective one of said plurality of display devices and configured to render, in parallel, a different portion of said graphical data such that said display devices display said image as a single logical screen, each of said graphical acceleration units comprising a plurality of graphical pipelines and a compositor, wherein one of said graphical acceleration units is configured to render at least a portion of a three-dimensional graphical object, each of a ~~the~~ plurality of graphical pipelines of said one graphical acceleration unit configured to render, in parallel, at least a portion of said three-dimensional graphical object, and wherein the compositor of said one graphical acceleration unit is configured to composite graphical data rendered by said plurality of graphical pipelines of said one graphical acceleration unit.

22. (Previously Presented) The system of claim 21, wherein each of said plurality of graphical pipelines of said one graphical acceleration unit is configured to mathematically combine a different offset to corresponding coordinate values of graphical data defining said three-dimensional graphical object such that said compositor of said one graphical acceleration unit jitter enhances said three-dimensional graphical object.

23. (Previously Presented) The system of claim 21, wherein each of said plurality of graphical pipelines of said one graphical acceleration unit is configured to render a different portion of said three-dimensional graphical object.

24. (Previously Presented) The system of claim 21, wherein each of said graphical pipelines of said one graphical acceleration unit is configured to render and super sample a different portion of said three-dimensional graphical object.

25. (Previously Presented) A single logical screen (SLS) graphical display method, comprising:

receiving graphical data defining an image;

displaying said image via a plurality of display devices as a single logical screen; and

for each of said display devices, rendering in parallel a different portion of said graphical data and compositing said rendered portion,

wherein said rendering comprises rendering, in parallel for a single one of said display devices, at least a portion of a three-dimensional graphical object via a plurality of graphical pipelines.

26. (Previously Presented) The system of claim 1, wherein said at least one graphical acceleration unit comprises an interface coupled to said first graphical pipeline via a first local area network (LAN) connection and coupled to said second graphical pipeline via a second LAN connection, said interface of said at least one graphical acceleration unit configured to transmit said graphical command to said first and second graphical pipelines via said first and second LAN connections.

27. (Previously Presented) The system of claim 1, wherein said second graphical pipeline is configured to discard, without rendering, all graphical data in said graphical command.

28. (Previously Presented) The system of claim 1, wherein said graphical command defines an image to be displayed by said one display device interfaced with said compositor, and wherein said graphical data rendered by said first graphical pipeline entirely defines said image to be displayed by said one display device interfaced with said compositor.

29. (Previously Presented) The system of claim 28, wherein said second graphical pipeline is configured to discard, without rendering, said graphical data from said graphical command.


30. (Previously Presented) The system of claim 28, wherein said second graphical pipeline is configured to render said graphical data from said graphical command.

31. (Previously Presented) The system of claim 7, wherein said first rendering means comprises a first plurality of local network (LAN) connections, each of said first plurality of pipeline means configured to receive, from a different one of said first plurality of LAN connections, a respective portion of said graphical data from said first graphical command, and wherein said second rendering means comprises a second plurality of local network (LAN) connections, each of said second plurality of pipeline means configured to receive, from a different one of said second plurality of LAN connections, a respective portion of said graphical data from said second graphical command.

32. (Previously Presented) The method of claim 11, further comprising transmitting, in said one graphical acceleration unit, graphical data from said single graphical command to each of said plurality of pipelines via a different local area network (LAN) connection.

33. (Previously Presented) The system of claim 21, wherein said one graphical acceleration unit comprises an interface configured to transmit, to each of said plurality of graphical pipelines, each three-dimensional graphical command received by said one graphical acceleration unit.

34. (Previously Presented) The system of claim 33, wherein said interface is coupled to each of said plurality of pipelines via a different local area network (LAN) connection.



35. (Previously Presented) The system of claim 21, wherein said one graphical acceleration unit comprises an interface configured to transmit, to each of said plurality of graphical pipelines, a plurality of three-dimensional graphical commands, wherein at least one of said plurality of graphical pipelines is configured to discard, without rendering, all graphical data in one of said graphical commands.

36. (Previously Presented) The system of claim 35, wherein said interface is coupled to each of said plurality of pipelines via a different local area network (LAN) connection.

37. (Previously Presented) The method of claim 25, further comprising transmitting, to each of said graphical pipelines, each three-dimensional graphical command having graphical data to be rendered by said single one of said display devices.

38. (New) The system of claim 1, wherein:

said first graphical pipeline is configured to mathematically combine a first offset with coordinate values included in said graphical data rendered by said first graphical pipeline;

said second graphical pipeline is configured to mathematically combine a second offset with coordinate values included in graphical data rendered by said second graphical pipeline;

and

said compositor is configured to blend color values from said graphical data rendered by said first graphical pipeline with color values from said graphical data rendered by said second graphical pipeline.

39. (New) The system of claim 38, wherein each of a plurality of graphical pipelines of at least one of said graphical acceleration units is configured to render only a respective portion of an image to be displayed by a corresponding one of said display devices.

40. (New) The system of claim 5, wherein a compositor of another of said graphical acceleration units is configured to blend color values included in graphical data rendered by a graphical pipeline with color values included in graphical data rendered by another graphical pipeline.

41. (New) The method of claim 11, wherein said rendering different portions comprises rendering the same image via each of a plurality of graphical pipelines in a single one of said graphical acceleration units.

42. (New) The method of claim 41, wherein said rendering different portions comprises rendering, in parallel, different images via a plurality of graphical pipelines in a single one of said graphical acceleration units.

43. (New) The system of claim 22, wherein each of a plurality of graphical pipelines of another of said graphical acceleration units is configured to render only a respective portion of an image to be displayed by a corresponding one of said display devices.
